

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/051974

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L23/522 H01F17/00 H01F41/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01L H01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 725 407 A (INTERNATIONAL BUSINESS MACHINES CORPORATION) 7 August 1996 (1996-08-07) column 4, line 16 - column 8, line 40; figure 2A	1,2,4,5, 7-13,15, 17-19
X	US 3 614 554 A (RICHARD SHIELD ET AL) 19 October 1971 (1971-10-19) column 1, line 64 - column 3, line 28; figures 1-4	1,2,4,5, 7-13,15, 17-19
Y	US 6 586 309 B1 (YEO KIAT SENG ET AL) 1 July 2003 (2003-07-01) column 3, line 31 - column 5, line 40; figure 1A	3,14
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

19 April 2005

Date of mailing of the international search report

14.07.05

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Edmeades, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/051974

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 202 296 A (XEROX CORPORATION) 2 May 2002 (2002-05-02) paragraph [0002] paragraphs [0015] - [0049]; figures 4-11 -----	3,14

Form PCT/ISA/210 (continuation of second sheet) (January 2004)

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2004/051974

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-5, 7-15, 17-19

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/051974

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0725407	A	07-08-1996	EP 0725407 A1	07-08-1996
			JP 8250332 A	27-09-1996

US 3614554	A	19-10-1971	CA 925221 A1	24-04-1973
			DE 1952160 A1	27-05-1970
			FR 2021494 A5	24-07-1970
			GB 1279160 A	28-06-1972
			NL 6915363 A	28-04-1970

US 6586309	B1	01-07-2003	SG 109447 A1	30-03-2005
			US 2003205778 A1	06-11-2003

EP 1202296	A	02-05-2002	EP 1202296 A1	02-05-2002
			JP 2002164214 A	07-06-2002

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-5,7-15,17-19

an integrated inductor formed directly on the surface of an integrated circuit substrate. The top level conductors are either integrated on the surface of the ic or are formed by wire bonds

2. claims: 6,16

An inductor is formed by the combination of conductive lines on a chip, bonding wires and conductive lines on a printed circuit board
